

Environmental Impact Analysis Process (EIAP)

Part 2 Action Items

Environmental Field Working Group

CADD/GIS Technology Center Internet URL :
<http://tsc.wes.army.mil>

01.040 - Use of GIS to Simplify EIAP

Scope: Develop web and GIS based electronic checklist for Environmental Impact Analysis Process (EIAP). EIAP is method commonly used for ensuring that new construction projects are in compliance with National

-~~Environmental Protection Agency (EPA)~~
~~Project Pre-Flight Policy~~
~~by Parrish Swearingen, Robins AFB,~~
~~GA. Parrish now works for Tetra Tech~~
~~EM, Inc.~~

- Project building on past/on-going work accomplished at Robins AFB and the Patuxent River Naval Air Station

(~~PA~~**PAX**)
Primary Website:

http://tsc.wes.army.mil/contacts/groups/FWG/Environmental/envprojects/01.040/01_040.htm



By Jim Weaver / courtesy USFWS

01.040 - Use of GIS to Simplify EIAP

Project to develop: (1) A web-based interactive EIAP checklist (i.e., checklist to ensure compliance with National Environmental Policy Act (NEPA), (2) link to Real Property Management (RPM) website, and (3) Data model and data standards content for incorporation into “transactional” FMSFIE Environmental Entity Set.

Status:

Part 1 (Funded in FY01) -

- Final detailed SOW completed on January 24, 2001.
- Contract awarded by Robins AFB to Tetra Tech, Inc., Atlanta, GA, in August 2001.
- Draft EIAP Web-Based Application and PAX/Robins NEPA Checklist Report completed in January 2002.
- Environmental FWG met with Tetra Tech, Inc. for project reviews on April 24-27, 2002 and June 4, 2002.
- Part 1 development completed in August 2002.

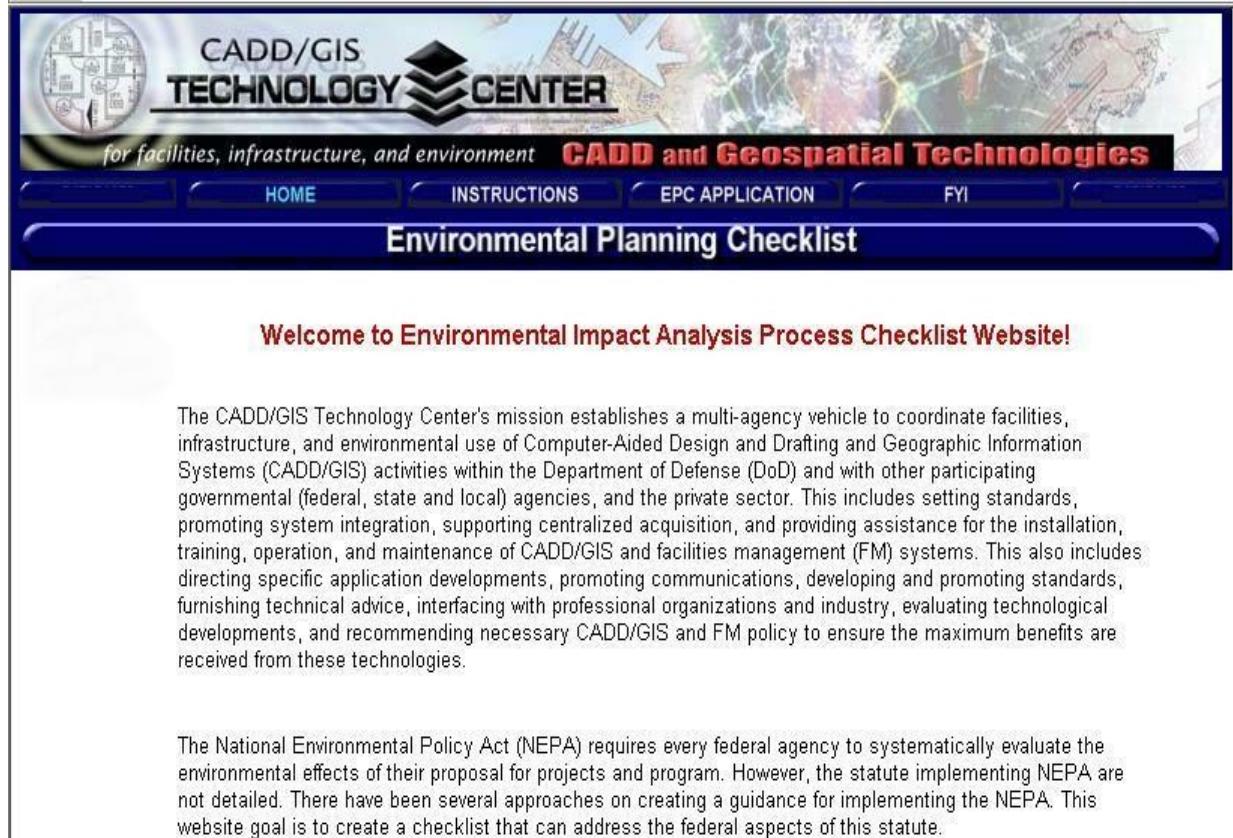
Part 2 (Funded in FY02) -

- Contract awarded to Tetra Tech, Inc. in September 2002.

Part 3 (To Be Funded in FY03) -

01.040 - Use of GIS to Simplify EIAP

- Web-Based Application requires installation on server with Microsoft Active Server Page (ASP) software.
- Can be accessed via Internet using Internet Explorer or Netscape browser. Requires download and installation of free Macromedia Shockwave Player plug-in.



The screenshot shows the homepage of the CADD/GIS Technology Center. At the top, there is a banner with the center's logo and the text "CADD and Geospatial Technologies". Below the banner, a navigation menu includes links for "HOME", "INSTRUCTIONS", "EPC APPLICATION", and "FYI". A blue header bar displays the title "Environmental Planning Checklist". The main content area features a red header "Welcome to Environmental Impact Analysis Process Checklist Website!". Below this, a large block of text describes the center's mission to coordinate facilities, infrastructure, and environmental use of CADD/GIS systems. Another section of text explains the goal of creating a checklist to address federal aspects of the National Environmental Policy Act (NEPA).

Welcome to Environmental Impact Analysis Process Checklist Website!

The CADD/GIS Technology Center's mission establishes a multi-agency vehicle to coordinate facilities, infrastructure, and environmental use of Computer-Aided Design and Drafting and Geographic Information Systems (CADD/GIS) activities within the Department of Defense (DoD) and with other participating governmental (federal, state and local) agencies, and the private sector. This includes setting standards, promoting system integration, supporting centralized acquisition, and providing assistance for the installation, training, operation, and maintenance of CADD/GIS and facilities management (FM) systems. This also includes directing specific application developments, promoting communications, developing and promoting standards, furnishing technical advice, interfacing with professional organizations and industry, evaluating technological developments, and recommending necessary CADD/GIS and FM policy to ensure the maximum benefits are received from these technologies.

The National Environmental Policy Act (NEPA) requires every federal agency to systematically evaluate the environmental effects of their proposal for projects and program. However, the statute implementing NEPA are not detailed. There have been several approaches on creating a guidance for implementing the NEPA. This website goal is to create a checklist that can address the federal aspects of this statute.

Use of GIS to Simplify Environmental Impact Analysis Process (EIAP)

Fiscal Year 2001 - 2002:

Project Scope & Status	Select Project No. 01.040 from Active Projects Website: http://tsc.wes.army.mil/projects/	
Project Overview	.ppt digital format	.pdf digital format
Detailed Scope of Work	EIAP_12401.doc	EIAP_120401.pdf

Project Deliverables:

Draft Web Based EIAP Application	Username & Password = SDSFIE			
Downloadable Version of Draft EIAP Application (August 2002)	Readme.txt	Installation Instructions	Eiap_install.doc	Eiap_install.pdf
Create folder on your computer entitled "eiap". Download eiap.zip to that directory. Unzip, then "right-click" on each file & make sure "archive" is not checked under file properties.				
Create subfolder entitled "data" (e.g., eiap/data). Download eiap_data.zip to that directory. Unzip, then "right-click" on "data" folder & make sure "archive" is not checked under properties.				
Create subfolder entitled "images" (e.g., eiap/images). Download eiap_images.zip to that directory. Unzip, then "right-click" on "images" folder & make sure "archive" is not checked under properties.				
Create subfolder entitled "pdf" (e.g., eiap/pdf). Download eiap_pdf.zip to that directory. Unzip, then "right-click" on "images" folder & make sure "archive" is not checked under properties.				
Report – Comparison of Robins AFB & Patuxent River Naval Air Station Environmental Review Checklist (July 2002)	pax robins compare.pdf			
Environmental Review Checklist Database (Microsoft Access) (February 2002)	Ecl model.zip			

Use of GIS to Simplify Environmental Impact Analysis Process (EIAP)

Part 2 Action Items: *Items denoted in red are underway*

1. Prepare “EIAP Instructions” paper (Word 2000) to support: (a) Installation of NMCI compliant EIAP Application on web server, (b) Utilization and maintenance of EIAP Application, and (c) Deployment of EIAP application.

Deferred “Installation of NMCI compliant EIAP Application on web server” to Part 3 (FY03 Funds).

Tetra Tech Comment - Will be putting together a user manual. Completion will be done when all changes to the Version 2 are complete. (Lead - Tracy Proud)

2. Change colors of codes (nothing, yellow and red).

Tetra Tech Comment - Color changes will be made to the introduction screen as well as the application. No color meaning section complete, yellow meaning section partially complete, and the red blocks meaning section is not complete. (Lead - Chris Martin)

3. Put “yes/no/don’t know” in “background”.

Use of GIS to Simplify Environmental Impact Analysis Process (EIAP)

Part 2 Action Items (Cont.): *Items denoted in red are underway*

4. Executable back button to look at previous questions.

Tetra Tech Comment - Back button will be added to allow for one step back only. Any further would disrupt NEPA decision tree logic. (Lead - Chris Martin)

5. Establish suggested SDSFIE compliant base map entity types for all Checklist questions (I thought the perspective as the CADD/GIS Technology Center here was to suggest the base map entity types that would be useful for a question and then each installation could choose which ones to create/use from that list. As opposed to suggesting the minimum base map entity types, having each installation do some homework and possibly adding to the list).

Tetra Tech Comment - Minimum Entity Type for Base map, as well Entity Type for each corresponding question will be posted on each question on the right portion of the input screen. This list will be based on input from the last EFWG meeting. (Lead - Tracy Proud)

Use of GIS to Simplify Environmental Impact Analysis Process (EIAP)

Part 2 Action Items (Cont.): *Items denoted in red are underway*

6. Summary bullet in front of answer (message). I'm not sure what this is.

Tetra Tech Comment - Need further clarification from the EFWG (Lead - Tracy Proud).

7. Password protect administrator tools.

Tetra Tech Comment - All Administrator Tools components might be better suited to an ASP version. (Lead - Chris Martin)

8. Sections should have intuitive names.

Tetra Tech Comment - Each section will follow the 4 pillows of Environmental: Restoration, Conservation, Compliance, and Pollution Prevention. (Lead - Tracy Martin)

9. Add comments field to the questions and the reports.

Use of GIS to Simplify Environmental Impact Analysis Process (EIAP)

Part 2 Action Items (Cont.): *Items denoted in red are underway*

10. Establish automated tracking number (Use Work Item/Number) and the ability of an installation to link to their current Work Item/Numbering system.

Tetra Tech Comment - This can be done however it would be better suited to an ASP version. (Lead - Chris Martin)

11. Break down summary reports to include comments from questions and comments concerning the report.

Tetra Tech Comment - A comment field will be added in the input screen. The location will be below the "Yes/No/Don't Know" buttons. These comments will then be presented in the summary report. (Lead - Chris Martin)

12. Fit to full screen.

Tetra Tech Comment - Will have to be done in the ASP version. (Lead - Chris Martin)

Use of GIS to Simplify Environmental Impact Analysis Process (EIAP)

Part 2 Action Items (Cont.): *Items denoted in red are underway*

13. Incorporate Search Tool.

Tetra Tech Comment – What search capabilities are requested? Any heavy search engine will have to be done in the ASP version. (Lead – Chris Martin)

14. Document rights/privileges of users/administrators.

Tetra Tech Comment – Will be putting together a user manual.

Completion will be done when all changes to the Version 2 are complete. (Lead – Tracy Proud)

15. Establish “Save as” option that allows the environmental review for one project to be copied over to another project number.

Tetra Tech Comment – Will be completed. (Lead - Chris Martin)

16. Edit capability within summary documentation.

Tetra Tech Comment – Because of the complex logic behind each question

Use of GIS to Simplify Environmental Impact Analysis Process (EIAP)

Part 2 Action Items (Cont.): *Items denoted in red are underway*

17. Establish links to appropriate Federal regulations at CADD/GIS Technology Center's Federal Real Property Management Regulations (RPM) website -

<http://tsc.wes.army.mil/rpm/>

Tetra Tech Comment – Prior to any links being made further clarification will have to be given as to what and where the links will be made. (Lead – Tracy Proud)

18. Update content and Appendix C of “Comparison of Robins AFB & Patuxent River Naval Air Station Environmental Review Checklist” report, incorporating comments received from Environmental FWG and PAX during FY02 and the updated questions to date.

Tetra Tech Comment – This document will be made final and will include comments received from the EFWG meeting as well as the new checklist questions received from PAX during FY02. (Lead –

Use of GIS to Simplify Environmental Impact Analysis Process (EIAP)

Part 2 Action Items (Cont.): *Items denoted in red are underway*

19. Provide information concerning how to use the software, connect to a GIS, and the base map entity types defined as part of the HELP file, and “EIAP Instructions” paper.

Tetra Tech Comment - Will be putting together a user manual. Completion will be done when all changes to the Version 2 are complete. (Lead - Tracy Proud)

20. Prepare draft logical data model for incorporation of EIAP decision tree data into transactional Facility Management Standard (FMSFIE).

Tetra Tech Comment - Will be obtaining the FMSFIE data model from the website to incorporate EIAP into data model. (Lead - Tracy Proud)

21. Design EIAP Application to record the EIAP decision tree data in a Microsoft Access (2000) database. Is this what we really want or

Use of GIS to Simplify Environmental Impact Analysis Process (EIAP)

Part 2 Action Items (Cont.): *Items denoted in red are underway*

22. Permit the User to be able to move from one section to another without being forced to answer all of the questions sequentially. Currently, all questions in each section have to be answered before being able to go to the next section.

Tetra Tech Comment - Will be completed and put on Version 2. (Lead - Chris Martin)

23. Change wording on website and in application to “third” person, rather than first person.

Tetra Tech Comment - Will be completed. (Lead - Tracy Proud)

24. If there are no action items, the user should simply move forward (i.e. see the next question) rather than have a statement saying “x,y,z” is not required and then requiring the user to click on this statement in order to move forward.

Use of GIS to Simplify Environmental Impact Analysis Process (EIAP)

Part 2 Action Items (Cont.): *Items denoted in red are underway*

25. Update EIAP Questions to be consistent with the updated PAX Questions (POC - Lasandra Teeters).

Tetra Tech Comment - All questions have been QC'd by the EFWG during the Atlanta meeting and those changes will be incorporated into Version 2. The updated PAX question will be reviewed and cross referenced to see if any additional changes should be made, if changes are required they will be approved by the EFWG prior to incorporation into Version 2.

26. With the new NMCI contract, the Navy and Marine Corps will not be able to download and install the Shockwave plug-in. Also, Microsoft ASP may not be used. Provide brief discussion/recommendations paper concerning the provision of a platform independent NMCI compliant web-based EIAP application for Part 3 development (to be funded in FY03).

Tetra Tech Comment - A recommendation letter will be drafted for the

Use of GIS to Simplify Environmental Impact Analysis Process (EIAP)

Part 2 Action Items (Cont.): *Items denoted in red are underway*

27. Additional considerations:
 - a. The government will own the code. Contractor will deliver CD containing all source code.
 - b. The final software should be easily editable by government personnel (i.e. non-technical personnel via a module). The final software must have the capability to:
 - i. Add/Delete/Edit sections, section names, and modify section order.
 - ii. Add/Delete/Edit questions and modify question order.



QUESTIONS?

Bobby Carpenter

CADD/GIS Technology Center

for facilities, infrastructure, and environment

phone: 601-634-4572

E-mail: Bobby.G.Carpenter@erdc.usace.army.mil

CADD GIS Technology Center Internet URL :

<http://tsc.wes.army.mil>

01.040 - Use of GIS to Simplify EIAP

EPC Help - Microsoft Internet Explorer

EIAP Checklist - HELP

Step 1: ENTER

Step 2: LOGIN

Step 3: SESSION

New Session
Existing Session

Step 4: PROJECT INFO

New Session
Existing Session

Step 5: SECTIONS

Step 6: QUESTIONS

Step 7: REVIEW/EDIT

Step 8: END

Login with your user name **(1)** and password **(2)**. (If you have not yet been granted access to the checklist, click on the e-mail link **(3)** provided at the bottom.) Then click on "Log in" to proceed **(4)**.

User name: my user name **1**

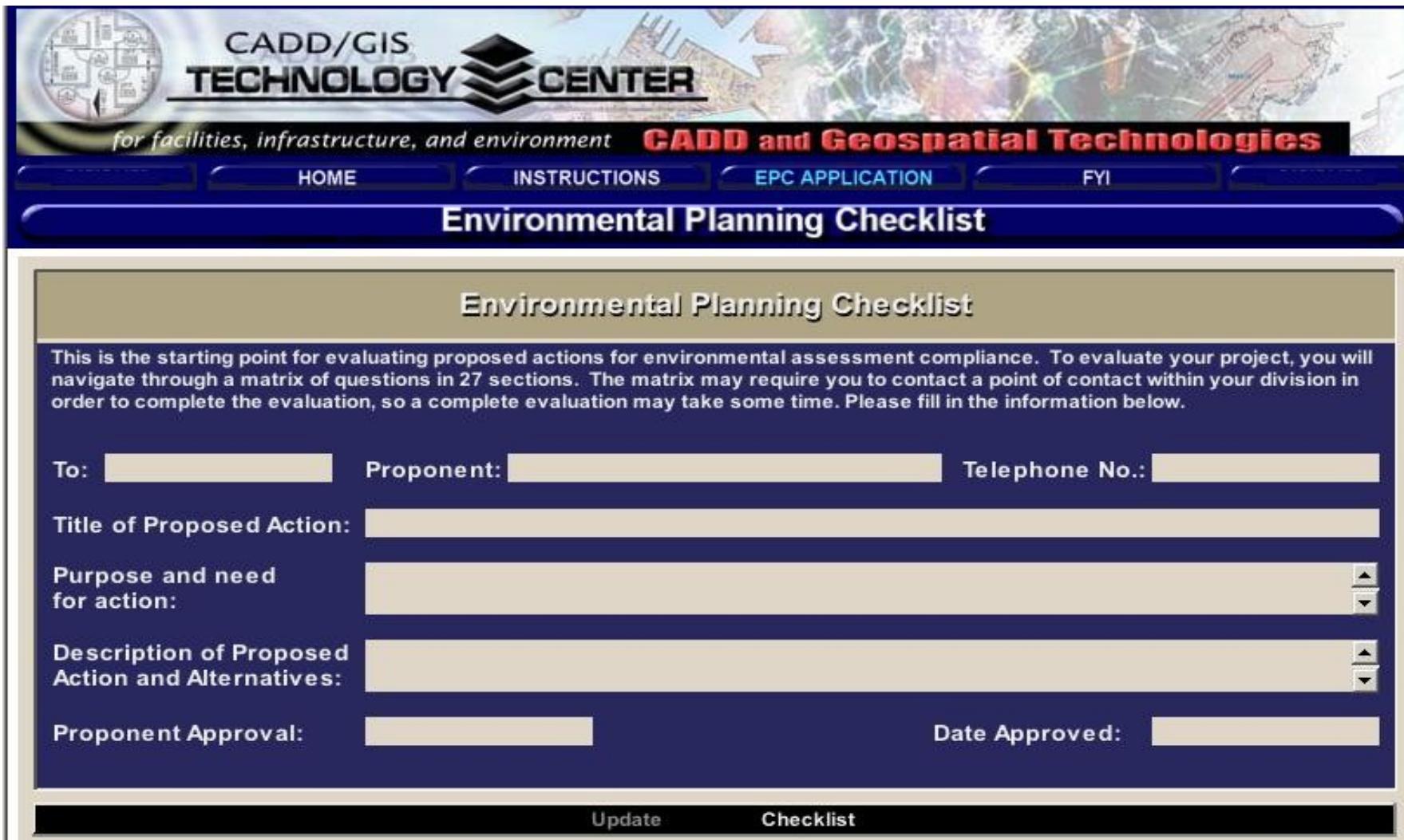
Password: my password **2**

Log in **4**

If you are unable to access the password, please contact: joe.jahne@itemi.com **3**

back next

01.040 - Use of GIS to Simplify EIAP



The screenshot shows the homepage of the CADD/GIS Technology Center. The header features the center's logo with a stylized 3D cube graphic, the text "CADD/GIS TECHNOLOGY CENTER", and the tagline "for facilities, infrastructure, and environment". Below the header, a banner reads "CADD and Geospatial Technologies". The main navigation menu includes links for "HOME", "INSTRUCTIONS", "EPC APPLICATION", and "FYI". A large, bold title "Environmental Planning Checklist" is centered above a form area. The form itself has a title "Environmental Planning Checklist" and a descriptive paragraph about evaluating proposed actions for environmental assessment compliance. It contains several input fields: "To:" (with a dropdown arrow), "Proponent:" (with a dropdown arrow), "Telephone No.:" (with a dropdown arrow), "Title of Proposed Action:" (text input), "Purpose and need for action:" (text input with scroll bars), "Description of Proposed Action and Alternatives:" (text input with scroll bars), "Proponent Approval:" (text input), and "Date Approved:" (text input). At the bottom of the form are "Update" and "Checklist" buttons.

CADD/GIS
TECHNOLOGY CENTER
for facilities, infrastructure, and environment

CADD and Geospatial Technologies

HOME INSTRUCTIONS EPC APPLICATION FYI

Environmental Planning Checklist

This is the starting point for evaluating proposed actions for environmental assessment compliance. To evaluate your project, you will navigate through a matrix of questions in 27 sections. The matrix may require you to contact a point of contact within your division in order to complete the evaluation, so a complete evaluation may take some time. Please fill in the information below.

To: Proponent: Telephone No.:

Title of Proposed Action:

Purpose and need for action:

Description of Proposed Action and Alternatives:

Proponent Approval: Date Approved:

Update Checklist

01.040 - Use of GIS to Simplify EIAP

CADD/GIS TECHNOLOGY CENTER
for facilities, infrastructure, and environment **CADD and Geospatial Technologies**

HOME INSTRUCTIONS EPC APPLICATION FYI

Environmental Planning Checklist

Section
1 Soil Disturbance
2 Storm Water and Wastewater
3 Critical Area and Coastal Zone
4 Historic Preservation
5 Capital Improvements
6 Endangered Species
7 Land Use
8 Tree Clearing
9 Bird/Aircraft Strikes
10 Deer Auto Collision
11 Pesticides
12 Solid Waste and Recycling
13 Hazardous Waste and Materials
14 Polychlorinated Biphenyls (PCB)
15 Air Quality (Emissions)
16 Drinking Water
17 Installation Restoration
18 Petroleum Systems
19 Oil Control
20 Groundwater Monitoring Wells
21 Asbestos
22 Lead
23 Socioeconomics
24 Traffic
25 Noise
26 Aesthetics
27 Environmental Justice

Environmental Planning Checklist

< Select a section from the list at left.

You may begin in any of the available 27 sections.

As you proceed through the checklist, you will see the following symbols indicating your progress in each section:

Section not yet visited	-	[Light Gray Box]
Section partially completed	-	[Medium Blue Box]
Section completed	-	[Dark Blue Box]

! < When you see this icon, place your mouse over the icon to see special instructions.

01.040 - Use of GIS to Simplify EIAP

CADD/GIS TECHNOLOGY CENTER
for facilities, infrastructure, and environment **CADD and Geospatial Technologies**

HOME INSTRUCTIONS EPC APPLICATION FYI

Environmental Planning Checklist

Section	Question	Entity Types
<ul style="list-style-type: none"><input type="checkbox"/> 1 Soil Disturbance<input type="checkbox"/> 2 Storm Water and Wastewater<input type="checkbox"/> 3 Critical Area and Coastal Zone<input type="checkbox"/> 4 Historic Preservation<input type="checkbox"/> 5 Capital Improvements<input checked="" type="checkbox"/> 6 Endangered Species<input type="checkbox"/> 7 Land Use<input type="checkbox"/> 8 Tree Clearing<input type="checkbox"/> 9 Bird/Aircraft Strikes<input type="checkbox"/> 10 Deer Auto Collision<input type="checkbox"/> 11 Pesticides<input type="checkbox"/> 12 Solid Waste and Recycling<input type="checkbox"/> 13 Hazardous Waste and Materials<input type="checkbox"/> 14 Polychlorinated Biphenyls (PCB)<input type="checkbox"/> 15 Air Quality (Emissions)<input type="checkbox"/> 16 Drinking Water<input type="checkbox"/> 17 Installation Restoration<input type="checkbox"/> 18 Petroleum Systems<input type="checkbox"/> 19 Oil Control<input type="checkbox"/> 20 Groundwater Monitoring Wells<input type="checkbox"/> 21 Asbestos<input type="checkbox"/> 22 Lead<input type="checkbox"/> 23 Socioeconomics<input type="checkbox"/> 24 Traffic<input type="checkbox"/> 25 Noise<input type="checkbox"/> 26 Aesthetics<input type="checkbox"/> 27 Environmental Justice	33. Does the proposed project involve any actions located within 1,000 feet of any Federal Candidate, State watchlist, or other species or habitat enjoying a special designation assigned by Federal or state agencies? <input type="button" value="Yes"/> <input type="button" value="No"/> <input type="button" value="Don't Know"/>	<p>Question specific entity types</p> <ul style="list-style-type: none">flora_special_plant_siteflora_replanting_sitefauna_special_habitat_siteshoreline_buffer_critical_areapreserve_area <p>Base map entity types</p> <ul style="list-style-type: none">installation_area,surface_water_course_centerline,road_area, airfield_surface_site,vehicle_parking_area,vehicle_driveway_area,structure_existing_site, shoreline

Review/Edit Answers **End Session**